

COURSE: Hydrobiology and Aquaculture

ACADEMIC YEAR:2016/2017

TYPE OF EDUCATIONAL ACTIVITY: Characterizing

TEACHER: Stefano Cecchini

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website:

<https://scholar.google.it/citations?user=osVMrrkAAAAJ&hl=it>

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Language: Italian

ECTS: 6 (5 lessons & tutorials/1 practice)

n. of hours: 56 (40+16)
(lessons e
tutorials/practice)

Campus: Potenza
School: SAFE
Program: LM Agricultural Sciences
and Technologies

Semester: I

EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES

The course aims to provide students with basic knowledge of aquatic life, the relationship between rearing environment and reared fish populations, problems and main techniques and types of farming. The acquisition of the theoretical basis concerning the aquatic ecosystem, energy, the cycle of matter and ecosystem productivity is a prerequisite for understanding the different forms of aquaculture.

Students will acquire skills and abilities related to knowledge of aquatic ecosystems and the interaction between culture activities and natural environment. The main skills will be those addressed to the ability to critically analyse the sustainability of culture activities in a given environment and the different farming technologies.

PRE-REQUIREMENTS

No requirements for attending the course and passing the final exam.

SYLLABUS

water cycle, cycles of matter, chemical and physical characteristics of water, aquatic ecosystem, flow of energy in the ecosystem, productivity, food chain and food web. Meaning of aquaculture, state of the art, relationships between reared animal and rearing environment, physioclimatology, breeding of the main fish species, extensive and intensive farming, mariculture.

TEACHING METHODS

40 hours of lessons and 16 hours of field practices (technical visits).

EVALUATION METHODS

Oral examination at the end of the course.

TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL

- AA. V.V. (2001). Acquacoltura Responsabile. A cura di S. Cataudella e P. Bronzi, Unimar-Uniprom, Roma.
- Bone Q., Marshall N.B., Blaxter J.H.S. (1995). Biology of Fishes. Blackie Academic & Professional, UK.
- Ghittino P. (1985). Tecnologia e Patologia in Acquacoltura. Vol. 1 Tecnologia. Tipografia E. Bono, Torino.
- Giordani G., Melotti P. (1984). Elementi di Acquacoltura. Edagricole, Bologna.
- Lawson T.B. (1994). Fundamentals of Aquacultural Engineering. Kluwer Academic Publishers.
- Odum E.P. (1988). Basi di Ecologia. Piccin, Padova.
- Saroglia M., Ingle E. (1992). Tecniche di Acquacoltura. Edagricole, Bologna.
- Wedemeyer G.A. (1996). Physiology of Fish in Intensive Culture Systems. Chapman & Hall, NY.
- clipboard and lecture slides.

INTERACTION WITH STUDENTS

- in the office at planned days/hours
- email, skype (every time)
- mobile (every time)

EXAMINATION SESSIONS (FORECAST)



**SCUOLA DI SCIENZE
AGRARIE, FORESTALI,
ALIMENTARI
ED AMBIENTALI**

Calendar online: <https://unibas.esse3.cineca.it/Home.do>

SEMINARS BY EXTERNAL EXPERTS YES NO

EVALUATION BOARD

Dr. Stefano Cecchini (President), Prof. Adriana Carmen Di Trana (Member), Prof. Maria Brigida Lioi (Alternate Member)
